Application No. 10/039308 Amendment dated May 15, 2006 After Final Office Action of January 13, 2006

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1-16 (canceled)

17. (currently amended) A wireless network, comprising:

a plurality of first wireless terminals configured to operate as cluster heads by communicating with at least one other cluster head over one or more backbone links, each one of the plurality of first wireless terminals including one or more backbone transceivers, [[and]]

at least one second wireless terminal configured to operate as a cluster member by communicating with an associated cluster head over one or more local links, each one of the at least one second wireless terminals including one or more cluster transceivers,

wherein at least one of the first or second wireless terminals includes both a backbone transceiver and a cluster transceiver, and

a third wireless terminal configured to:

determine whether the third wireless terminal includes a functioning backbone transceiver, and

affiliate with one of the first wireless terminals when the third wireless terminal includes no functioning backbone transceiver.

18. (original) The wireless network of claim 17, wherein the backbone transceiver is configured to operate over first distances and in a first frequency range, and

After Final Office Action of January 13, 2006

wherein the cluster transceiver is configured to operate over second distances that are

shorter than the first distances and in a second frequency range that is different from the first

frequency range.

19. (original) The wireless network of claim 18, wherein the backbone transceiver

includes a first radio operating in an ultrahigh frequency (UHF) range, and

wherein the cluster transceiver includes a second radio operating at substantially 2.4

GHz.

20. (original) The wireless network of claim 17, wherein at least one of the first

wireless terminals includes two different types of backbone transceivers.

21. (original) The wireless network of claim 17, wherein at least one of the first

wireless terminals includes two different types of cluster transceivers.

22. (original) The wireless network of claim 17, wherein at least one of the at least

one second wireless terminals includes two different types of cluster transceivers.

23. (original) The wireless network of claim 17, wherein at least one of the first

wireless terminals includes a backbone transceiver and a cluster transceiver.

24. (previously presented) The wireless network of claim 17, wherein the one or

more backbone transceivers includes one or more of the following: a radio operating in an

3

Docket No.: BBNT-P01-144

Application No. 10/039308 Amendment dated May 15, 2006

After Final Office Action of January 13, 2006

ultrahigh frequency (UHF) range, a laser transceiver, a microwave transceiver, or a code division

multiple access (CDMA) radio.

25. (previously presented) The wireless network of claim 17, wherein the one or

more cluster transceivers includes one or more of the following: an acoustic transceiver, an

omni-directional optical transceiver, a very high frequency (VHF) transceiver, a code division

multiple access (CDMA) radio, an ultra-wideband (UWB) radio, or a time-division multiple

access (TDMA) radio.

26-28. (canceled)

29. (currently amended) A method performed by a first terminal, the first terminal

being a wireless, mobile terminal, the method comprising:

receiving beacons from a plurality of second terminals, where at least one of the beacons

is received according to a first wireless access protocol and at least one other one of the beacons

is received according to a second wireless access protocol;

determining a signal strength associated with each of the second terminals based on the

beacons received according to the first and second wireless access protocols;

sending an affiliation message to one of the second terminals based on the determined

signal strength;

determining whether a response to the affiliation message is received from the one of the

second terminals; [[and]]

4

Application No. 10/039308 Amendment dated May 15, 2006 After Final Office Action of January 13, 2006

affiliating with the one of the second terminals when the response to the affiliation message is received from the one of the second terminals; and

affiliation message, determining whether a response to the affiliation message is received, and affiliating with the one of the second terminals as the first terminal moves to different locations.

30. (canceled)

## 31. (new) A first terminal, comprising:

means for receiving beacons from a plurality of second terminals, where at least one of the beacons is received according to a first wireless access protocol and at least one other one of the beacons is received according to a second wireless access protocol;

means for determining a signal strength associated with each of the second terminals based on the beacons received according to the first and second wireless access protocols;

means for sending an affiliation message to one of the second terminals based on the determined signal strength;

means for determining whether a response to the affiliation message is received from the one of the second terminals;

means for affiliating with the one of the second terminals when the response to the affiliation message is received from the one of the second terminals; and

means for periodically repeating the receiving beacons, determining a signal strength, sending an affiliation message, determining whether a response to the affiliation message is

Application No. 10/039308 Amendment dated May 15, 2006

After Final Office Action of January 13, 2006

received, and affiliating with the one of the second terminals as the first terminal moves to different locations.

Docket No.: BBNT-P01-144